



SYNONYMY OF AND REMARKS UPON THE SPECIFIC
NAMES AND AUTHORITIES OF FOUR SPECIES
OF AUSTRALIAN MARINE SHELLS, ORIGINALLY
DESCRIBED BY DR. JOHN EDWARD GRAY IN
1825 AND 1827.

BY JOHN BRAZIER, C.M.Z.S., &c., &c.

In this paper I have endeavoured to give Dr. Gray credit for his work done in 1825 and 1827, as far as regards his specific names. Three of them have been put down as being described or figured by Wood, Quoy and Gaimard, Sowerby and others.

First we have *Nassa livida* Gray, well described in Captain King's Narrative of a Survey of the Coasts of Australia, Vol. 2, Appendix p. 484, 1827. And from that date the shell has not even been mentioned by those authors who have catalogued or monographed the genera, Reeve, Kiener, Marrat and Tryon.

The next species in order is *Strombus australis* Gray, always quoted as of Sowerby.

Then we have *Bulla australis*, Gray described in the Annals of Philosophy, new series, Vol. 9, 1825. It is also mentioned again by Gray in Captain King's Voyages, Appendix Vol. 2, p. 490, 1827. It is always quoted as of Quoy and Gaimard. The shell figured both by Reeve and Sowerby in their works as *Australis* of Quoy and Gaimard is a distinct species, and comes from Tahiti and other Polynesian Islands. Quoy and Gaimard's Shell came from New Holland and not Tahiti.

The next in order is *Bulla lineata* Gray, described in the Annals of Philosophy, new series, Vol. 9, p. 408, 1825. It is quoted by all authors as being of Wood, who was the first to figure it in 1828. I append a list of the synonyms with their references and dates of publication wherever I have been able to ascertain them.

I. *NASSA LIVIDA*. Gray

1827. *Nassa livida*, Gray in Captain King's Narrative of a Survey of the Coasts of Australia, Vol. 2, Appendix p. 484, No. 57.

(1) *Buccinum unicolorum*, Kiener. Coquilles, Vivantes, p. 6, No. 59. *Buccinum unicolor*, Kiener, pl. 19, fig. 69.

1851. *Nassa (Alectrion) unicolor*, Kiener. A. Adams. Proc. Zool. Soc., p. 106.

1853. *Nassa (Zeuxis) unicolor*, Kiener. H. and A. Adams, Genera of Recent Mollusca, Vol. 1, p. 119.

1853. *Nassa unicolorata*, Reeve. Conch. Icon., pl. 3, fig. 17.

1853. *Nassa rutilans*, Reeve. Conch. Icon., pl. 22, fig. 147.

1854. *Nassa unicolor*, Hombron et Jacq., Voyage au Pôle Sud l'Astrolabe et la Zélée, Vol. 5, p. 76. Atlas, pl. 21, fig. 13-15.

1873. *Nassa (Zeuxis) unicolor*, Kiener. Paetel, Catalog der Conchylien-Sammlung, p. 35.

1874. *Nassa unicolor*, Kiener. Schmeltz, Museum Godeffroy, Catalog. 5, p. 124, No. 3,699.

1876. *Nassa (Alectrion) rutilans*, Reeve. Brazier, Proc. Linn. Soc., N.S.W., Vol. 1, p. 180, No. 47.

1882. *Nassa (Zeuxis) unicolorata*, Kiener. Tryon Manuel of Conchology, p. 31, pl. 10, figs. 88, 89, 90.

1884. *Nassa unicolor*, E. A. Smith. Voyage of H.M.S. Alert, p. 48, No. 30.

1884. *Nassa (Zeuxis) unicolorata*, Kiener. Brazier, Proc. Linn. Soc., N.S.W., Vol. 9, p. 793, No. 3.

Hab.—New Holland, (*Captain P. P. King*); Cape York, N. Australia (*Jukes*); Darnley Island, Torres Straits, 30 fathoms, sand and mud bottom (*Brazier*); Port Curtis and Port Molle, Queensland, 12-20 fathoms (*Coppinger*); Sir Charles Hardy's

(1) *Spécies General et Iconographe des Coquilles* Par L. C. Kiener, continued by Dr. P. Fischer, 1834 up to 1880.

Island, N. E. Australia (*Jukes*; Rockingham Bay, Queensland (*Brazier Eclipse Expedition* 1871); Port Darwin and Port Essington (*E. Spalding*); Cossack, N. W. Australia (*J. F. Bailey*); Ceram (*Hombroon and Jacquinot*) New Zealand ??? (*Cuming*) Cardwell, Rockingham Bay, Queensland (*E. E. Beddome*); West Australia (*W. H. Hargraves Collection in the Australian Museum*); East Coast of Australia (*Schmeltz*.)

This species was described by Dr. Gray in 1827, and re-described and figured by Kiener in his *Coquilles Vivantes*, as *Buccinum unicolorum*, he also figures it as *Buccinum unicolor*. A. Adams, in 1851, in a list published in the proceedings of the Zoological Society, of London, classes it as *Nassa unicolor*; and in 1853, Reeve, in his Monograph of the Genus *Nassa*, calls it *Nassa unicolorata*, and at the same time he calls a variety of it *Nassa rutilans*, said to have come from New Zealand, on the authority of the species maker, Mr. Hugh Cuming, who never visited New Zealand. The species is confined to Torres' Straits. And in 1854, Hombroon and Jacquinot also re-describe it in the Voyage Au Pôle Sud as *Nassa unicolor*; they do not make any mention of Kiener's name. In 1873, Paetel, in his Catalog der Conchylien, Sammlung quotes *N. unicolor*, Kiener. Schmeltz, in Museum Godeffroy Catalog V., 1874, quotes *N. unicolor*, Kiener. G. W. Tryon, in his Manual of Conchology, 1882, quotes it as *N. unicolorata*, Kiener. Mr. E. A. Smith, in the Zoology of H.M.S. Alert, 1884, quotes it as *Nassa unicolor*, Kiener. I have also done the same in these proceedings, 1884, as *Nassa unicolorata*, Kiener. Dr. Gray distinctly says that his specimens of *N. livida* were presented to the British Museum by Captain P. P. King. It is quite astonishing that Reeve never mentioned Gray's name, as he had access to figure any species contained in the British Museum.

2. STROMBUS AUSTRALIS. Gray.

1827. *Strombus Australis*, Gray. In King's Narrative of a Survey of the Coasts of Australia. Vol. 2. Appendix, p. 489, No. 90.

1842. *Strombus Australis*, Sowerby. Thes. Conch., Vol. 1, p. 36, sp. 53, figs. 96, 97.

1843. *Strombus Australis*, Sowerby. Kiener, Coq. Viv. Strombus, p. 21, pl. 14, fig. 1.

1843. *Strombus Australis*, Sowerby. Deshayes in Lam. Anim. Sans Vert., 2nd edition, Vol. 9, p. 716, No. 41.

1845. *Strombus Australis*, Sowerby. Kuster's in Conch. Cab., 2nd edition, p. 30, pl. 13., fig. 2.

1851. *Strombus Australis*, Sowerby. Reeve, Conch. Icon. pl. 14, sp. 34.

1854. *Strombus (Monadactylus) Australis*, Sowerby. H. and A. Adams, Genera of Recent Mollusca, Vol. 1, p. 259.

1867. *Strombus Australis*, Sowerby. Mitchell in Catalogue of the Mollusca in the Collection of the Government Central Museum, Madras, p. 18, No. 2.

1873. *Strombus Australis*, Sowerby. Paetel. Catalog. der Conch. Sammlung, p. 7, 52.

Hab.—West Coast of New Holland (*Captain P. P. King*); Rowley Shoals, West Coast of Australia (*J. F. Baley*); West Australia (*Sir William Denison* and *Australian Museum*): Cape York, North Australia and West Australia (*W. H. Hargraves's Collection in Australian Museum*); Nicol Bay, North West Australia (*Brazier*).

This is another of Dr. Gray's species described in Captain King's Narrative of a Survey of the Coast of Australia, Vol. 2, p. 489, 1827, the type specimens collected by Captain King were presented by him to the British Museum, and since that date all Monographers from Kuster, Sowerby, Reeve, and Kiener quote Sowerby as the authority of the species. Dr. Gray had the practice of putting specific names very often to species in the British Museum but not attaching his name to them, no doubt that is the cause of the error.

3. BULLA AUSTRALIS. Gray.

1825. *Bulla australis*, Gray in Annals of Philosophy, New Series, Vol. 9, p. 408.

1827. *Bulla australis*, Gray in Capt. King's Survey of Australia, Vol. 2, Appendix p. 490, No. 92.

1833. *Bulla Australis*, Quoy and Gaimard. Voyage de l'Astrolabe Zoologie, Vol. 2, p. 357. Atlas, pl. 26, figs. 38-39.

1835. *Bulla australis*, (Gray), in Yates' account of New Zealand Appendix p. 308.

1836. *Bulla australis*, Quoy and Gaimard. Deshayes in 2nd edition of Lamarck, Vol. 7, p. 673.

1843. *Bulla Australis*, Gray. King's Voyage in Dieffenbach New Zealand, Vol. 2, p. 243, No. 114.

1850. *Bulla australis*, Quoy. Jays Catalogue of Shells, 4th edition, p. 112, No. 3174.

1854. *Bulla oblonga*, A. Adams in Sowerby Thes. Conch., Vol. 2, p. 577, No. 50, pl. 123, fig. 74.

1854. *Bulla oblonga*, H. and A. Adams. Genera of Recent Mollusca, Vol. 2, p. 16.

1854. *Bulla australis*, Quoy and Gaimard. H. and A. Adams, Mollusca, Vol. 2, p. 16.

1859. *Bulla australis*, Chenu (non Quoy and Gaimard). Manuel de Conch., Part 1 p. 389, fig. 2938.

1859. *Bulla oblonga*, A. Adams. Chenu, Manuel de Conch., Part 1, p. 389, fig. 2940.

1865. *Bulla australis*, Quoy and Gaimard. Angas, Proc. Zool. Soc. p. 188.

1867. *Bulla oblonga*, A. Adams. Angas, Proc. Zool. Soc., p. 226.

1868. *Bulla oblonga*, A. Adams. Reeve, Conch. Icon., pl. 3, species 9, fig. a.b.c.

1873. *Bulla oblonga*, A. Adams. Hutton, Manual of New Zealand Mollusca.

1873. *Bulla australis*, Quoy and Gaimard. Von Martens Critical List of New Zealand Mollusca, p. 38.

1873. *Bulla australis*, Quoy. Paetel, Cat. der Conch. Sammlung, p. 81.

1877. *Bulla oblonga*, A. Adams. Tenison-Woods, Proc. Royal Soc. Tasmania, p. 47.

1878. *Bulla oblonga*, A. Adams. B. Australis, Gray. Hutton in Journal de Conch, 3rd series, Vol. 26, p. 40.

1880. *Bulla oblonga*, Adams. B. Australis, Gray. Hutton, Manual of the New Zealand Mollusca, p. 121.

Hab.—New Holland (*Berry, Captain, P.P. King*); King George's Sound, South West Coast of Australia (*Quoy and Gaimard*); East Coast of New Zealand (*Yate's*); New Zealand (*Dieffenbach*); Tasmania (*C. E. Beldome, W. F. Petterd, Tenison-Woods*); Port Jackson, near the Sow and Pigs Reef, from 2 to 5 fathoms on a grassy bottom (*Brazier*); Spencers and St. Vincent's Gulf, South Australia (*G. F. Angas*); Port Lincoln and Adelaide, South Australia (*G. Masters and Australian Museum*); Australia (*Mr. F. Strange in Museum of the Asiatic Society of Bengal*).

This is a complete history of this unfortunate species, and the way authors have treated it since being first described by Dr. Gray in the Annals of Philosophy, new series, Vol. 9, p. 408, 1825, and again in 1827, in Captain King's survey of Australia, Vol. 2. In 1833, Quoy and Gaimard usurp Dr. Gray's specific name; and in 1835, Dr. Gray, in Yate's account of New Zealand, quotes his own *Bulla australis*, and refers to King's Voyage to New Holland. Deshayes in Lamarck's 2nd edition, 1836, makes no mention of Grey, but quotes Quoy and Gaimard as the authority. Dr. Gray in Dieffenbach's New Zealand, 1843, also mentions his *Bulla australis*. A. Adams in Sowerby, Thes. Conch., 1854, re-describes it as *Bulla oblonga*; also quotes it in

the Genera of Recent Mollusca of Henry, and Arthur Adams at the same they quote *Bulla australis*, Quoy. Chenu in his Manuel de Conch., figures a species at fig. 2938, as *Bulla australis*, the species so figured is not the *Bulla australis*, Quoy, which is the *Bulla australis* of Gray. Chenu also figures the *Bulla oblonga*, A. Adams, which is the *Bulla australis*, of Gray also Quoy. Mr. Angas, in 1865, quotes *Bulla australis*, Quoy and Gaimard, from South Australia, and in 1867, he quotes it as *Bulla oblonga*, A. Adams, from Port Jackson. Reeve, in 1868, treats it as *Bulla oblonga*, A. Adams. The *Bulla* called *Australis*, and figured as such in the Conch. Icon., as of Quoy and Gaimard, is not that shell but a distinct species from Tahiti and other Pacific Islands. Mr. A. Adams, in Sowerby's Monograph, gives Quoy and Gaimard's description for a shell from New Holland, and figures another shell for it from Tahiti. In 1873, Professor Hutton quotes it as *Bulla oblonga*, Adams; in the same year Von Martens, in his critical list of New Zealand, quotes it as *Bulla australis*, Quoy, a common shell of New Holland. In the same year it is quoted by Paetel in his catalogue as *Bulla australis*, Quoy, from Adelaide, and *Bulla oblonga*, A. Adams, from the Philippine Islands, the latter locality is an invention of Mr. Cuming. In 1877, Tenison-Woods quotes it as *Bulla oblonga*, A. Adams, and says that it has been confounded with *Bulla australis*, Quoy, a shell found at Tahiti. In 1878, Professor Hutton quotes it as *Bulla oblonga*, A. Adams, *Bulla australis*, Gray, he also repeats the same error. In 1880, in the Manual of New Zealand Mollusca, he quotes Dieffenbach, New Zealand, for his information, but his quotation is entirely wrong. The information that I have found in Dieffenbach, New Zealand, Vol. 2, p. 243, No. 114, 1843, is *Bulla australis*, Gray, King's Voyage, so that it is quite evident that Dr. Gray did not forget that he had mentioned it in King's Voyage in 1827.

The *Bulla australis* of A. Adams in Sowerby Thesaurus Conchyliorum from Tahiti, found on reefs Cuming is quite a distinct species from the *Bulla australis*, Gray, and Quoy and Gaimard. Adams species requires a new specific name. *B. australis*, Gray is never

found on reefs, its home is deep water, and it is generally washed on shore after light gales in countless hundreds, about the deep bays of Port Jackson and Botany Bay. The *B. australis*, A. Adams, is found on reefs, we obtained it at the Home Island, Palm Island, North East Australia; Bet and Darnley Islands, Torres Straits, Chevert Expedition. I quoted it as *Bulla australis*, Quoy and Gaimard, in the Proc. Linn. Soc., N.S.W., Vol. 1, p. 83, on the authority of the monograph of the Family Bullidæ, by Mr. Arthur Adams, in Sowerby's Thes. Conch, Vol. 2, p. 576, No. 45, pl. 122, figs. 64, 65, 66. As it requires a new name it may be called *Bulla Adamsi*, Brazier.

I am under great obligation to Dr. George Bennett, F.L.S., for his great kindness in lending me Dieffenbach's Work on New Zealand, for reference (2); unfortunately it is a work that is not to be found in the Australian Museum or the Free Public Library. There is a copy of Yate's New Zealand in the Free Public Library, and while writing this paper I secured in a second-hand book-shop a very fine copy of the same work.

4. BULLINA LINEATA. Gray.

1825. *Bulla lineata*, Gray. Annals of Philosophy, new series, Vol. 9, p. 408.

1828. *Bulla lineata*, Br. Mus. Wood in Supplement to the Index Testaceologicus, p. 9, No. 1, pl. 3, fig. 1, Bulla.

1850. *Bulla lineata*, Gray. Jay's Catalogue of Shells, 4th edition, p. 113, No. 3, 189.

1854. *Bulla (Bullina) lineata*, Wood. A. Adams in Sowerby's Thes. Conch., Vol. II., p. 563, No. 2, pl. 120, fig. 2.

(2) I have to thank my kinsman, Mr. R. C. Rossiter, of Noumea, New Caledonia, for his liberal and generous action in presenting me with the whole of the Zoology of the Voyage of the Astrolabe.

1854. *Bullina undata*, H. and A. Adams. Genera of Recent Mollusca, Vol. 2, p. 8, Vol. 3, pl. 56, fig. 5a, not *Bulla undata* of Brug.

1856. *Bulla lineata*, Wood. Hanley's Edition of Wood, Index Test Supplement, p. 209, pl. 3, fig. 1.

1859. *Bullina lineata*, Wood. Chenu. Manual de Conch., Vol. 1, p. 387, fig. 2,915.

1860. *Bullina lineata*, W. Theobald. Junr. Catalogue of the Recent Shells in the Museum Asiatic Society of Bengal, p. 114.

1867. *Bullina lineata*, Wood. Angas., Proc. Zool. Soc., p. 225.

1870. *Bullina lineata*, Wood. Reeve, Conch. Icon., pl. 1, fig. 2, a. b.

1873. *Aplustrum lineatum*, Hutton. Catalogue of New Zealand Mollusca.

1873. *Bullina lineata*, Wood. Pætel, Catalog. der Conch., Sammlung, p. 81.

1878. *Aplustrum lineatum*, Hutton. Journal de Conch., 3rd series, Vol. 26, p. 40, No. 243.

1880. *Bullina lineata*, Wood. Hutton, Manuel of New Zealand Mollusca, p. 120.

1882. *Bullina lineata*, Wood. Dunker in Index Molluscorum Maris Japonica, p. 163.

1883. *Bullina lineata*, Wood. Tyron, Structural and Systematic Conchology, Vol. 2, p. 361-428, pl. 87, fig. 44.

Hab.—New Holland, (*Mr. E. Barnard*); Coogee Bay, New South Wales, (*G. F. Angas, Brazier*); Middle Harbour, (*G. F. Angas*); Moon Islet, Lake Macquarie, New South Wales, (*W. H. Hargraves*); Shark Island, Port Jackson, in rock pools, (*Brazier*); Hauraki Gulf, New Zealand, rare, (*F. W. Hutton*).

This species was described by Dr. Gray in 1825 and Mr. W. Wood finding it in the British Museum in 1828 figures it in the Supplement to the Index Testaceologicus and calls it *Bulla lineata*, Br. Mus., found on the tablets in the British Museum. It should be removed from the Family Bullidæ and placed in the Family Tornatellidæ. All the specimens that I have found, had when extracting the animal a small, horny, linear, transverse operculum like the Tornatellidæ. Mr. Angas in 1867 remarks on this species:—"No one can fail to detect this pretty species, banded with two lines of rose-colour, and painted with wavy longitudinal stripes of the same hue. It forms a beautiful object in the water, when crawling about on the sandy bottoms of the rock pools left by the receding tide, the expanded membraneous foot of the animal being bordered with azure-blue. On examination I found it had a small, horny, linear, transverse operculum like the *Actæonidæ*, and ought therefore probably to be included in that family."